



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,534	07/29/2003	Riad Ghabra	LC 0136 PUS	1533

36014 7590 04/10/2007
ARTZ & ARTZ, P.C.
28333 TELEGRAPH ROAD, SUITE 250
SOUTHFIELD, MI 48034

EXAMINER

RUTLAND WALLIS, MICHAEL

ART UNIT	PAPER NUMBER
----------	--------------

2836

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/604,534

Applicant(s)

GHABRA ET AL.

Examiner

Michael Rutland-Wallis

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/05/2007 has been entered.

Response to Arguments

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Nevertheless Applicant's argument has been fully considered but is not persuasive.

Applicant has substantially amended at least claims 1 and 14 and rendered moot the previous drawing objections under 37 CFR 1.83(a), accordingly the objection is withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-6, 9, 11 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Friedrich et al. (U.S. Pat. No. 5,862,691)

With respect to claims 1 and 15 Friedrich teaches an active keyed locking system for a vehicle comprising: a fixed position sensor (formed by hall sensors 2 and 3 contained within permanent magnet item 1 see col. 1 line 65 "This system will respond very accurately to the position of the arcuate magnet") statically generating a magnetic field (generated by item 1); a keyed actuated device (item 4) comprising a field altering device (item 5) said keyed actuated device altering said magnetic field when placed in proximity (i.e. when key is placed within the cylinder) thereto, said fixed position sensor generating a position signal (characteristic series of pulses col. 2 lines 25-30) indicative of the rotational position of said keyed actuated device (item 5) based on the alteration of said statically generated magnetic field. Friedrich teaches the use of a "lock system" (item 6) which may interpret the series of pluses generated by the sweeping of the field altering device, and for example respond by generating an alarm (i.e. a vehicle component) or the setting of antitheft condition (col. 2 lines 5-10) when the proper pulse pattern is not produced

Art Unit: 2836

With respect to claim 2 Friedrich teaches the keyed actuated device is a lock assembly.

With respect to claim 3 Friedrich teaches the keyed actuated device is a key.

With respect to claim 5 and 6 Friedrich teaches the key comprises a permanent magnet, when rotated alters the field.

With respect to claim 9 Friedrich teaches the position sensor is a Hall effect sensor.

With respect to claim 11 Friedrich teaches controller enables a vehicle component selected from at least one of a vehicle accessory, an ignition, a door lock (col. 2 lines 28-30), and a vehicle system in response to said position signal.

With respect to claim 16 Friedrich teaches recognizing a key (cylinder receives the key) and generating a recognition signal (series of pulses); and enabling an active keyed locking system (col. 2 lines 5-10 or 28-30) in response to said recognition signal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 7-8, 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedrich et al. (U.S. Pat. No. 5,862,691) in view of Kimura et al. (U.S. Pat. No. 5,117,097)

With respect to claims 7-8 and 12 Friedrich teaches switch item 9 and mechanical latch component but does not give details of the key in terms of a transponder. Kimura teaches a key system for a vehicle where in the key comprises inductance and capacitance resonance circuitry has intrinsic resonance points as key information (abstract) and operating the securing or enabling of a vehicle accordingly. It would have been obvious to one of ordinary skill in the art at the time of the invention to include such circuitry in the device of Friedrich in order to increase the security of the vehicle.

With respect to claims 4 and 13 Friedrich teaches the keyed actuated device is a lock assembly. Friedrich does not teach the assembly comprising a key antenna. Kimura teaches the use of an antenna formed by the resonant LC circuit (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the use of an antenna to transmit key information to the controller in the vehicle.

Claims 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedrich et al. (U.S. Pat. No. 5,862,691) in view of Janssen (U.S. Pat. No. 6,958,551) Friedrich does teach the inclusion of a base station. Janssen teaches the position sensor is coupled within a base station (see Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a base station in

Art Unit: 2836

order to give the locking system structural protection and a modular housing for mounting the system in a vehicle.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (U.S. Pat. No. 5,117,097) in view of Friedrich et al. (U.S. Pat. No. 5,862,691) Kimura teaches an ignition enabling system for a vehicle comprising: a key (item 40) having a transponder (formed with item 44) a lock assembly (see Fig. 2 or 4). Kimura teaches magnetically coupled keyed communication in col. 1 lines 65 – col. 2 lines 10 is known to detect changes in flux as key position is changed. Friedrich teaches a similar system wherein a position sensor (item 2 and 3) located proximate to a keyed actuated device and generating a position signal indicative (i.e. rotated to start position or rotated to off position) of position of said keyed actuated device in response to detected change in a magnetic field (see Figs 3-5) due to rotation of said field altering device about an axis (axis G) extending through said altering device. Friedrich further teaches the use of a "lock system" (item 6) which may interpret the series of pluses generated by the sweeping of the field altering device, and for example respond by generating an alarm (i.e. a vehicle component) or the setting of antitheft condition (col. 2 lines 5-10) when the proper pulse pattern is not produced. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Friedrich to include position sensing position circuit and controller in order to securely control vehicle components and decrease vehicle theft.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedrich et al. (U.S. Pat. No. 5,862,691) in view of Kokubu et al. (U.S. Pat. No. 5,745,026)

With respect to claim 18 Friedrich teaches the device and method of claim 15 however fails to teach the use of a second authorization signal. Kokubu teaches generating a first authorization signal; generating a second authorization signal in response to said first authorization signal; verifying said second authorization signal (column 3 line 66- column 4 line 40); and generating said position signal in response to said verification (column 5 lines 25-43). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a method such as that disclosed in Kokubu in order to provide increased security to the vehicle key and antitheft system.

With respect to claim 19 Kokubu teaches determining position of said keyed actuated device comprises: generating at least one base signal (code ΔB column 4 line 17-26); altering (code ΔC column 4 line 17-26) said at least one base signal via actuation of said keyed actuated device; and generating (code ΔD column 4 line 17-26) said position signal in response to said alteration of said at least one base signal.

With respect to claim 20 Kokubu teaches at least one base signal is modulated (Fig 2 item 5) using a modulation technique selected from at least one of amplitude modulation (column 4 lines 27-37), frequency modulation, and phase modulation.

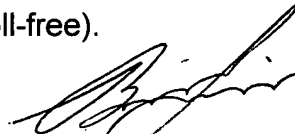
Conclusion

Art Unit: 2836

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rutland-Wallis whose telephone number is 571-272-5921. The examiner can normally be reached on Monday-Thursday 7:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

MRW